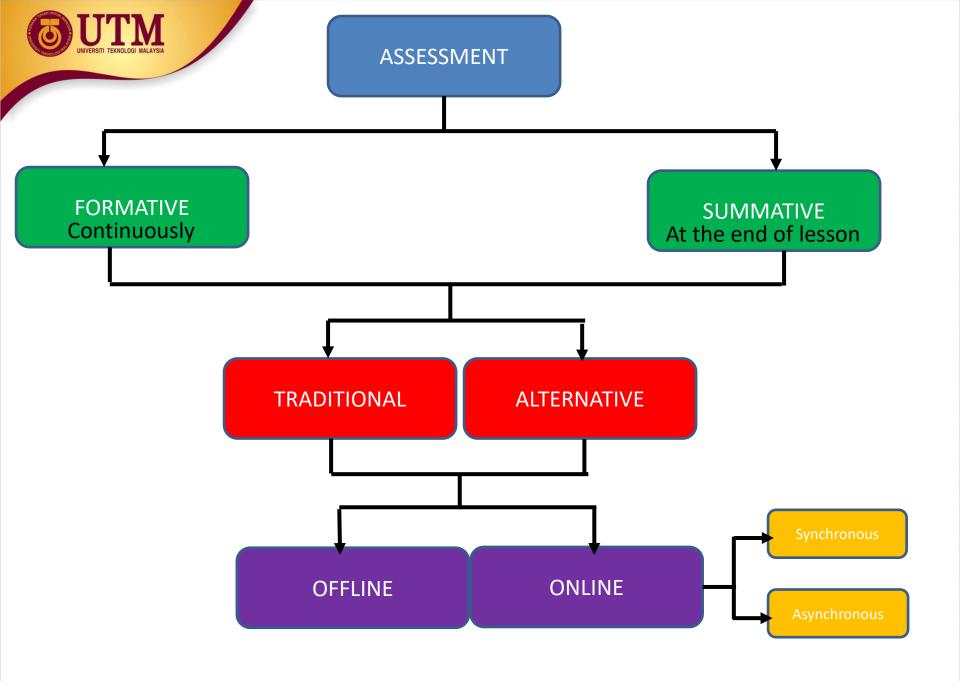
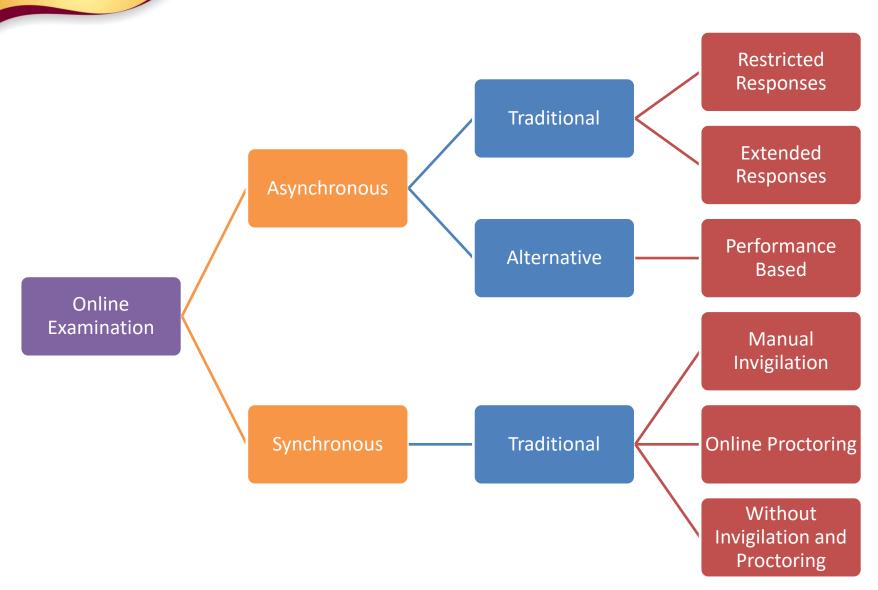


## CREATING TAKE HOME EXAMINATION QUESTIONS

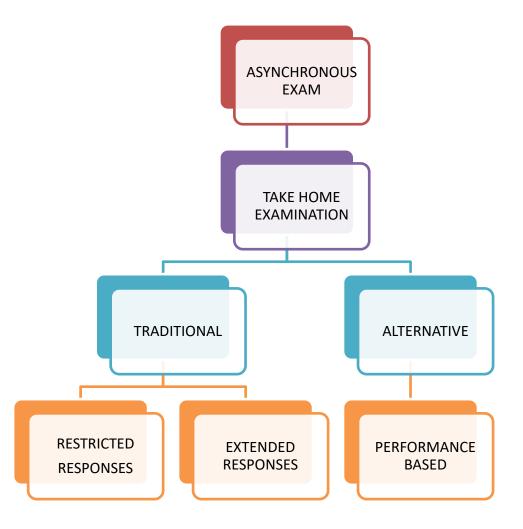
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#### **Definition of Take Home Examination**

Take Home Examination is a test that is given to candidates to complete on their own time, without supervision, over a specified period of time. It is typically assumed to be open-book emphasising on higher order thinking types of questions. It is taken in an unsupervised environment, usually with access to reference texts and materials.



## PURPOSES OF TAKE HOME EXAMINATION

The main premise for open book exams is that teachers can devise questions that require students to answer in more critical and analytical ways thus encouraging high-order thinking skills in their students; as compared to closed book or traditional exams that tend to encourage rote learning and more superficial application of knowledge.



#### CONSIDERATION IN CREATING THE

- Assess the interpretation and application of knowledge, comprehension skills, and critical thinking skills rather than only knowledge recall
- Make use of case-based exam questions that require students to apply critical reasoning skills in response to a trigger scenario



#### CONSIDERATION IN CREATING THE

- Devise clear and unambiguous questions to limit student confusion and time spent interpreting the question so students can spend their time making use of their textbook or memory aid to effectively answer the questions
- Design your questions and overall exam paper with the learning outcomes in mind i.e. what skills and knowledge are you assessing?



# RESTRICTED VS EXTENDED RESPONSES

Restricted	Extended
1. Limits the form and content of candidates' responses (e.g., short answer, problem sets).	1. Allows for lengthier responses from candidates and permits candidates lots of flexibility in their responses (e.g., essay)
2. Limit the ways in which you will permit the students to express their answer in their own words.	2. Allow students to express their own ideas and interrelationships among ideas and use their own strategy for organization
3. There are specific correct answers.	3. No specific correct answers but reasonable and logic



### RESTRICTED RESPONSE QUESTION

Compare the research paradigm for quantitative research and qualitative research.

(6 marks)



### RESTRICTED RESPONSE QUESTION

From the article given, explain what is/are the research design and the technique of sampling implement by the researcher?

(4 marks)



### RESTRICTED RESPONSE QUESTION

#### Answer All of the questions

a) Compute the difficulty index for the following items. Show your work and interpret your results (The asterisk indicates the correct option.

Options	A 10	B* 5	C 8	D 0	ANSWER:
Options	A 4	B 2	C* 16	D 3	ANSWER:

(6Marks)



### **EXTENDED RESPONSE QUESTION**

Create one conceptual framework from the given articles and justify either the variables are appropriate to be the independent variables, dependent variables and mediator / moderator variables.

(15 marks)



#### **EXTENDED RESPONSE QUESTION**

Ahmad wants to measure the level of teachers' knowledge on assessment. He plans to use closed ended questionnaire with Likert scale. In your opinion, does Ahmad using the right tool in measuring the knowledge? If yes, justify your answer and design an item using closed ended questionnaire with Likert scale. If not, justify your answer by designing other appropriate tools and scale in measuring knowledge domain.

(15 Marks)



#### **EXTENDED RESPONSE QUESTION**

You are given an example of research article. Evaluate;

- [i] research objective, research questions and research hypothesis,
- [ii] research design,
- [iii] research population, sampling and technique of sampling,
- [iv] research instrument and
- [v] research data analysis

from the perspective of measurement and evaluation.

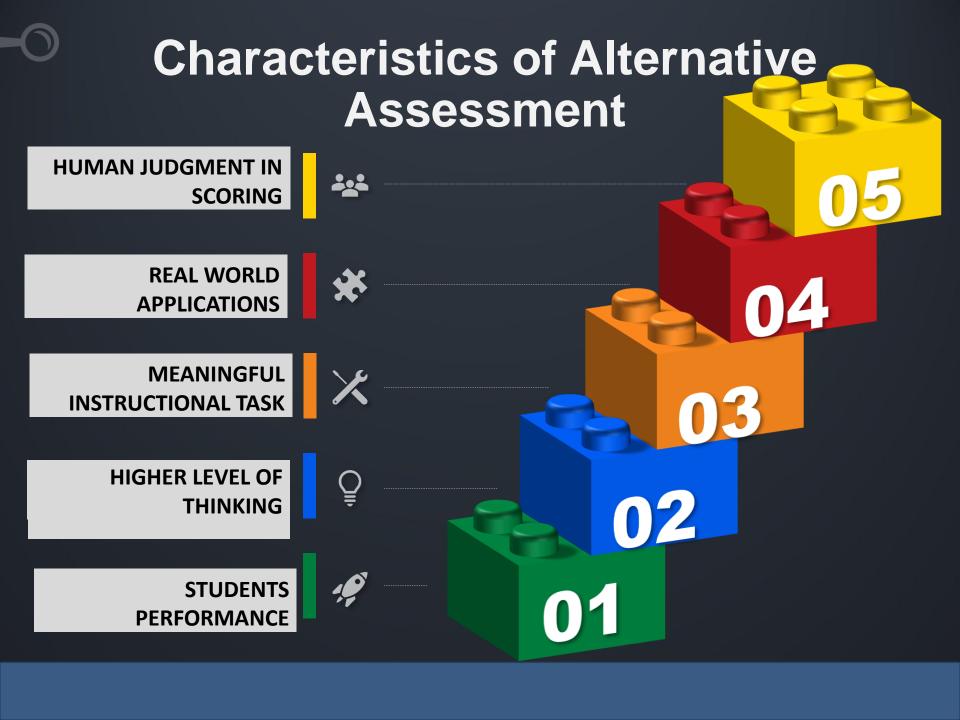
[20 marks]



#### SUMMATIVE ALTERNATIVE ASSESSMENT



Alternative assessments are used to determine what students can and cannot do, in contrast to what they know or do not know





## META CONTENT ANALYSIS

Table 1: Meta-content analysis on alternative assessment concept and definition.

Reference	Non-	Authentic	Students	Formative	Evidence
	traditional	procedure	Empowerment		Learning
Siemens (2015)	/		/	/	/
Hargreaves, Earl, and	/			/	/
Schmidt(2002)					
Alderson and Banerjee (2001)	/			/	/
Smith (1999)	/			/	
Kohonen (1997)	/	/	/		/
Sabol & Zimmerman (1997)	/				
Hamayan (1995)	/	/		/	
Huerta-Macias (1995)	/		/	/	
Law &Eckes (1995)	/	/	/		
Chittendon (1991)	/		/		/

#### **EXAMPLE**

#### TRADITIONAL HOTS

1. Create one conceptual framework from the given articles and justify either the variables are appropriate to be the independent variables, dependent variables and mediator / moderator variables (15 marks)

#### **ALTERNATIVE ASSESSMENT**

You want to investigate the preference of UTM lecturers' working from home.

(a) Do a meta-analysis to find the valid conceptual definition, construct formation and operational definition in measuring the preference.

(10Marks)

(a) Choose one appropriate motivation theory by comparing with other two theories from different scholars.

(10Marks)

(a) Finally using your own reflection, value how important the process of systematic literature review in producing valid research findings.

(10Marks)

Please upload the materials as an evidence



 The most important is, the assessments are measuring the Course Learning Outcomes and align with the activities in learning in teaching (constructive Alignment)





Online Learning Guidelines duringCOVID-19 Pandemic pg . 12

Assessment Method	Formative (F)/Summati ve (S)	Traditional (T)/ Alternative (A)	Peer Assessment	Instructor- Student Assessment	Self Assessment	Instructor Assessment
Performance Assessment	F or S	А	Yes	Yes	Yes	Yes
E-portfolio	F or S	А	Yes	Yes	Yes	Yes
Final Exam	S	Т	-	-	+	Yes
Reflection Journal and Paper	F or S	Α	+	Yes	Yes	Yes
Research Projects and Reports	F or S	А	-	-	-	Yes
Case Study Analysis and Report	F or S	А	Yes	Yes	Yes	Yes
Discussion	F	А	Yes	Yes	Yes	Yes

Example of online assessment method



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Summative Assessment Method	Synchronous (S)/ Asynchronous (A)	Traditional (T)/ Alternative (A)	Online Tools
Final Exam	S	Т	UTM E-learning
Simulation/Demonstration	S or A	Α	Recorded video, BigBlueButton, ZOOM, Webex, Google Meet, LifeSize/Whatsapp
Portfolio	А	А	UTM E-portfolio, Wordpress, Blogger, EduBlog
Task based project	А	А	UTM e-Learning Assignment, NearPod,
Take home test	А	A/T	EdPuzzle, Flipgrid, Padlet or Trello
Case Study	S or A	Α	
Presentation	S or A	А	Recorded video, BigBlueButton, ZOOM, Webex, Google Meet, LifeSize/WhatsApp

Example of online summative assessment method



- ✓ Make sure the alternative assessment can measure the course learning outcomes and program learning outcomes
- ✓ The task must be performance based and involve high order thinking skills
- ✓ Choose the online platform that user friendly, easy to access and can capture evidence
- ✓ Choose the online assessment tools that has validity, reliability and fairness
- ✓ Share the rubric with the students
- ✓ Do monitoring more than one time for Formative assessment
- ✓ Do analysis and CQI



#### CRITERIA OF ASSESSMENT TASK

- Measuring high order thinking skills in cognitive level (Applying), at least (Mechanisms) skills in psychomotor and (Valuing) level in affective
- Measuring more than declarative knowledge
   (functional/ procedural knowledge). So its
   measuring more on applied proficiency more than it
   measures knowledge
- Need evidence and support resources / materials in performing task (not only can answer using logic).
- Human judgment in marking (subject matter expert)
- Can prove the process of doing (E.g.: Reflection)



#### **SOMETHING TO PONDER**

Is it compulsory to have Final Examination in your course to assess students' learning outcomes?



- Depending on Professional Bodies
- MQA requires summative assessment and not necessarily final examination.
- Assessment and evaluation also can be alternative
- Towards flexible education and flexible assessment



- 2. Is it necessary to cover all the topics in final exam?
- 3. Is it necessary to include all levels of Bloom's Taxonomy in the final exam?



- If it is Multiple Choice Question, yes.
- For essay or subjective questions, choose the most important topic or combine the topics as long can measure the CLO.
- Align the item with the weight of the topic, to guide which topic is more important to be asked.
- Make sure it is align with the CLO being measured.



3. Can all PLOs be measured in the final exam?



 Traditional final exam only appropriate to measure cognitive domain. Thus, it is not appropriate to measure affective and psychomotor domain.



Choose appropriate item types for your objectives.

- Essay questions? Problem sets? MCQ?
- So, It depends on your learning objectives
- There is no single best type of exam question: the important thing is that the questions reflect your learning objectives.



- Highlight how the exam aligns with course objectives.
- Identify which course objectives the exam addresses
- e.g., "This exam assesses your ability to analyze the research papers based on your research knowledge.



- Write instructions that are clear, explicit, and unambiguous.
- Make sure that students know exactly what you want them to do
- Be more explicit about your expectations than you may think is necessary
- for example, to specify if you want answers to be written in paragraphs or bullet points or if you want students to show all steps in problem-solving.



- Write instructions that preview the exam.
- Students' test-taking skills may not be very effective, leading them to use their time poorly during an exam.
- Instructions can prepare students for what they are about to be asked by previewing the format of the exam, including question type and point value
- e.g., there will be 10 multiple-choice questions, each worth two points, and two essay questions, each worth 15 points



- Word questions clearly and simply
- Avoid complex and convoluted sentence constructions, double negatives, and idiomatic language that may be difficult for students
- Also, in multiple-choice questions, avoid using absolutes such as "never" or "always," which can lead to confusion.



### **CREATING EXAM**

- Enlist a colleague to read through your exam.
- Sometimes instructions or questions that seem perfectly clear to you are not as clear as you believe.
- Thus, vet your exam to make sure everything is clear and unambiguous. This will also ensure the content validity and relevancy of the exam in measuring you learning outcomes



### **CREATING EXAM**

- Think about how long it will take students to complete the exam.
- One way to determine how long an exam will take students to complete is to take it yourself and allow students triple the time it took you – or reduce the length or difficulty of the exam.



#### CREATING EXAM

- Consider the point value of different question types.
- The point value you ascribe to different questions should be in line with their difficulty, as well as the length of time they are likely to take and the importance of the skills they assess
- Ask yourself: How many subskills are involved? Have students answered questions like this before, or will this be new to them? – Use table of specification
- difficult and complex question types should be assigned higher point values than easier, simpler question types



✓ Avoiding ambiguous directives such as discuss or even describe, which can elicit rambling responses. s (CRLT, 2016; Jacobs & Chase, 1992; Reiner et al.). Instead, instructors should embrace more defined action verbs, such as justify, analyze, compare, or summarize



#### **EXAMPLE**

POOR ITEM	BETTER ITEM
Bincangkan kajian kualitatif dan kuantitatif dalam penyelidikan pendidikan	Bandingkan bagaimana kajian kuantitatif berbeza dengan kajian kualitatif berdasarkan; a) falsafah b) Persampelan c) Instrumentasi d) Data analisis.  Berikan contoh bagi setiap satu jenis kajian semasa menerangkan setiap perbezaan komponen.



#### **EXAMPLE**

POOR ITEM	BETTER ITEM
Analisis kepentingan memohon kebenaran dan pengakuan daripada	Berikan ulasan anda berkaitan kepentingan meminta kebenaran daripada
responden semasa membuat kajian.	responden semasa membuat kajian. Berikan contoh / situasi bagaimana kepentingan ini boleh dibandingkan semasa memohon kebenaran
	responden dalam soal selidik dan dalam membuat temubual.



#### **EXAMPLE**

POOR ITEM	BETTER ITEM
Jelaskan apa yang dimaksudkan dengan paradigma penyelidikan secara post positivisme?	Apakah pegangan asas di sebalik paradigma penyelidikan secara post positivisme dan bagaimanakah ia berperanan dalam pendekatan kajian secara kuantitatif?



✓ Specify expectations and scoring procedures.

Students will want to know not only the total point value of each response, but also how you will evaluate their work and what components you will prioritize (spelling, grammar, or use of references, writing style or format, What kind of organization might you be looking for? Should calculations be labeled?



✓ Suggest time allocations and limitations.

Plan for and articulate the amount of time students should spend responding to each essay question. Without adequate limits, students might provide responses that are too long, off task, or incomplete



✓ Avoid the item that can get the answer directly from materials.

Use interpretive exercise types or item that need students to analyze rather than factual items.



 Ask students to put themselves in the shoes of a professional in their field (for example, ethical considerations when working as part of a professional team) can easily translate to an open book question, as to replicate real-world conditions students would probably draw on other material, such as industry regulations or professional standards



# **SOCRATIC QUESTIONS**

Type of Socratic Question	Example questions and starters
Clarification questions	<ul> <li>What do you mean by?</li> <li>Could you put this another way?</li> <li>What do you think is the main issue?</li> <li>Could you provide an example?</li> <li>Could you expand upon that point further?</li> </ul>
Assumption questions	<ul> <li>Why would someone make this assumption?</li> <li>What is assuming here?</li> <li>What could we assume instead?</li> <li>You seem to be assuming</li> <li>Do I understand you correctly?</li> </ul>

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# **SOCRATIC QUESTIONS**

Type of Socratic Question	Example questions and starters
Reason and evidence questions	<ul> <li>What would be an example?</li> <li>Why do you think this is true?</li> <li>What other information do we need?</li> <li>Could you explain your reason to us?</li> <li>By what reasoning did you come to that conclusion?</li> <li>Is there reason to doubt that evidence?</li> <li>What led you to that belief?</li> </ul>
Origin or source questions	<ul> <li>Is this your idea or did you hear it from some place else?</li> <li>Have you always felt this way?</li> <li>Has your opinion been influenced by something or someone?</li> <li>Where did you get that idea?</li> <li>What caused you to feel that way?</li> </ul>



# **SOCRATIC QUESTIONS**

Type of Socratic Question	Example questions and starters
Implications and consequence questions	<ul> <li>What effect would that have?</li> <li>Could that really happen or probably happen?</li> <li>What is an alternative?</li> <li>What are you implying by that?</li> <li>If that happened, what else would happen as a result? Why?</li> </ul>
Viewpoint questions	<ul> <li>How would other groups of people respond to this question? Why?</li> <li>How could you answer the objection thatwould make?</li> <li>What might someone who believed think?</li> <li>What is an alternative?</li> <li>How are and's ideas alike? Different?</li> </ul>



### **BLOOM TAXONOMY**

Type or level of question	Students are asked to	Example questions and starters
Understanding	demonstrate understanding by constructing meaning from information.	<ul> <li>In your own words,</li> <li>Explain how</li> <li>What did X mean when?</li> <li>Give an example of</li> </ul>
Applying	apply knowledge and understanding to a particular task or problem.	<ul> <li>How would you use?</li> <li>What examples can you find to?</li> <li>How would you solve using what you've learned?</li> <li>What would happen if?</li> </ul>

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### **BLOOM TAXONOMY**

Type or level of question	Students are asked to	Example questions and starters
Analysing	examine different concepts and make distinctions between them.	<ul> <li>What are the parts or features of?</li> <li>What are the competing arguments within?</li> <li>Why is X different to Y?</li> <li>Compare and contrast</li> <li>What is the relationship between A and B?</li> </ul>
Evaluating	make judgements about concepts or ideas.	<ul> <li>What is most important/effective?</li> <li>Which method is best?</li> <li>Which is the strongest argument?</li> </ul>

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### **BLOOM TAXONOMY**

Type or level of question	Students are asked to	Example questions and starters
Creating	develop new ideas from what they know and understand.	<ul> <li>How would you design a?</li> <li>What alternatives are there to?</li> <li>What changes would you make?</li> <li>What would happen if?</li> <li>Suppose you could what would you do?</li> <li>How would you evaluate?</li> <li>Can you formulate a theory for?</li> </ul>



### **THANK YOU**